

IN THE SPECIFICATION:

On page 6, line 19, delete "include".

IN THE CLAIMS:

Please amend the claims as follows:

1. A substrate processing apparatus comprising:
- (a) a chamber comprising a radiation source;
- (b) one or more detectors to detect a first radiation from the chamber, and a second radiation from the radiation source; and
- (c) a signal analyzer adapted to normalize a property of the first radiation relative to a property of the second radiation.

40. A substrate processing apparatus comprising:
- (a) a chamber comprising a radiation source other than a plasma in a process zone in the chamber;
- (b) a detector to detect a property of a radiation from [a] the radiation source; and
- (c) a feedback controller adapted to regulate a power level of the radiation source in relation to the detected property of the radiation.

42. An apparatus according to claim 40 wherein the feedback controller is adapted to maintain the property of the radiation at a substantially constant level.

44. A substrate processing apparatus comprising:

- (a) a chamber;
- (b) a radiation source;
- (c) a detector to detect a property of a radiation from a radiation

source and generate a reference signal; and

(d) a radiation modulator in a path of a radiation being transmitted from the radiation source to the chamber, [whereby] the radiation modulator being adapted to [may] receive a signal from the radiation source and control a property of the radiation in relation to the reference signal.

Please add the following claims:

57. A substrate processing apparatus comprising:

- (a) a chamber comprising a radiation source;
- (b) a detector to detect a property of a radiation from the radiation source; and
- (c) a feedback controller adapted to regulate a power level of the radiation source in relation to the detected property of the radiation, wherein the feedback controller is adapted to maintain the property of the radiation at a substantially constant level.

58. An apparatus according to claim 57 wherein the feedback controller is adapted to control a power supply that powers the radiation source.

59. An apparatus according to claim 57 wherein the detector is adapted to detect a property of the radiation comprising one or more of an intensity, phase or wavelength.